AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (previously presented) A system for provisioning a communication medium, and the system comprising:

- a pair of X-DSL modems configured to couple to one another via the communication medium and to communicate with one another over the communication medium via an X-DSL modulated communication channel;
- a first of the pair of X-DSL modems including:
    - input buffers configured to accept input of at least one TDM communications channels together with at least one packet based communication channel and the at least one TDM communication channel including successive TDM frames;
    - a payload framer coupled to the input buffers and the payload framer loading a corresponding portion of the at least one TDM communication channel into each X-DSL frame, together with a corresponding portion of the at least one packet based communications channel into a remaining portion of each X-DSL frame and the payload framer additionally loading each X-DSL frame with a parameter for synchronizing the frames of the at least one TDM communication channel on the first of the pair of X-DSL modems and a second of the pair of X-DSL modems; and
- the second of the pair of X-DSL modems including:
    - a payload deframer for deframing both the at least one TDM communication channel together with the corresponding portion of the at least one packet based communications channel in each X-DSL frame from the first of the pair of modems, and

- a TDM frame synchronizer coupled to the payload deframer for synchronizing the TDM frames of the at least one TDM communication channel on the first of the pair of X-DSL modems and the second of the pair of X-DSL modems utilizing the synchronization parameter embedded in each X-DSL frame by the first of the pair of modems, thereby maintaining TDM frame synchronization despite variations in a number of bits transmitted in a unit of time on the X-DSL modulated communication channel.

Claim 2 (currently amended) The system of Claim 1, wherein the at least one TDM communication channel comprises a first TDM communication channel and a second TDM communication channel each comprising one of: a full T1 service having 24 DS0 and a fractional T1 service having less than 24 DS0.

Claim 3 (previously presented) An X-DSL modem configured to couple to a communication medium for communication with an opposing modem via an X-DSL modulated communication channel, and the X-DSL modem comprising:

- input buffers configured to accept input of at least one TDM communication channel together with at least one packet based communication channel and the at least one TDM communication channel including successive TDM frames;

- a payload framer coupled to the input buffers and the payload framer loading a corresponding portion of the at least one TDM communication channel into each X-DSL frame, together with a corresponding portion of the at least one packet based communication channel into a remaining portion of each X-DSL frame and the payload framer additionally loading each X-DSL frame with a parameter for synchronizing the frames of the at least one TDM communication channel on the X-DSL modem and the opposing modem, thereby maintaining TDM frame synchronization despite variations in a

number of bits transmitted in a unit of time on the X-DSL modulated communication channel .

Claim 4 (currently amended) The X-DSL modem of Claim 3, wherein the at least one TDM communication channel comprises a first TDM communication channel and a second TDM communication channel each comprising one of: a full T1 service having 24 DS0 and a fractional T1 service having less than 24 DS0.

Claim 5 (previously presented) A method for provisioning an X-DSL modulated a communication medium, and the method comprising:

- accepting input of at least one TDM communication channel together with at least one packet based communication channel and the at least one TDM communication channel including successive TDM frames;
- loading a corresponding portion of the at least one TDM communication channel into each X-DSL frame;
- determining a space availability in each X-DSL frame;
- adding corresponding portions of the at least one packet based communication channel into each X-DSL frame loaded in the loading act, subject to the space availability determination in the determining act;
- loading each X-DSL frame with a parameter for synchronizing the frames of the at least one TDM communication channel despite variations in a number of bits transmitted in a unit of time on the X-DSL modulated communication channel.

Claim 6 (currently amended) The method of Claim 5, wherein:

- the at least one TDM communication channel comprises a first TDM communication channel and a second TDM communication channel each comprising one of: a full T1 service having 24 DS0 and a fractional T1 service having less than 24 DS0.